MAIN I (POWER SUPPLY/SERVO/SYSTEM CONTROL) SCHEMATIC DIAGRAM

NOTE: MARK ▪ IS LEADLESS (CHIP) COMPONENT.

NOTE: HOW TO READ CONVERGED LINES
(100) B4
↑ LOCATION GRID OF THE OTHER END OF THE LINE
LINE NUMBER

TEST POINT INFORMATION
□→: USED FOR THE INDICATION OF TEST POINT WITH COMPONENT LEAD ON FOIL SIDE.
□→: USED FOR THE INDICATION OF TEST POINT WITH COMPONENT LEAD ON COMPONENT SIDE.
⊘ : USED FOR THE INDICATION OF TEST POINT WITH NO TEST PIN.
● : USED FOR THE INDICATION OF TEST POINT WITH TEST PIN.

NOTE:
1. DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.
2. MAINTAIN ORIGINAL FUNCTION AND RELIABILITY OF REPAIRED UNITS. ONLY USE ORIGINAL REPLACEMENT PARTS WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THE SERVICE MANUAL.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SPECIFIED PARTS.

CAPSTAN SERVO
CYLINDER SERVO

POWER SUPPLY SECTION

TRANSISTOR	
Q1201	Q-3
Q1202	Q-2
CONNECTOR	
P1201	Q-2

SYSTEM CONTROL SECTION

TRANSISTOR	
Q6001	A-9
Q6006	E-9
Q6007	L-4
Q6008	K-3
Q6009	N-5
Q6010	L-10
Q6011	L-9
IC	
IC6001	G-6
IC6003	M-7
IC6004	L-4
CONNECTOR	
P6001	Q-7
TEST POINT	
TP6001	J-5
TP6002	D-5
TP6003	J-5
TP6004	N-8
TP6005	N-8
TP6006	O-8
TP6007	O-8
TP6008	O-8
TP6009	K-5
TP6011	K-6
TP6012	L-5
TP6014	J-4
TP6015	J-4

SERVO SECTION

TRANSISTOR	
Q6201	B-7
Q6207	H-3
IC	
IC6201	B-6
CONNECTOR	
P6201	D-3
TEST POINT	
TP6201	D-7
TP6202	D-7
TP6203	F-4
TP6204	G-3
TP6205	E-7
TP6206	H-4
TP6207	H-3
TP6208	C-6
TP6209	B-7
ADJUSTMENT	
R6201	F-3

(FOIL CONNECTION) TO MAIN III

1	TV POWER ON (H)
2	POWER DOWN (L)
3	BACK-UP +5V
4	SERIAL CLOCK 0
5	SERIAL DATA 0
6	SERIAL DATA 1
7	
8	SW +12V
9	UNSW +5V(SYS-CTL)
10	CSI (SYS-CTL)

(LOCATION GRID NO. IN MAIN II SCHEMATIC DIAGRAM:B4-G7)

P6001: 1 SAFETY TAB SW, 2 GND
SAFETY TAB SWITCH UNIT VEK5475R

(FOIL CONNECTION) TO MAIN II

1	7.16MHZ
2	
3	CYL ERROR
4	CYL PG/FG
5	CYL ETR
6	UNSW +14V
7	UNSW +5V(SYS-CTL)
8	
9	FULL ERASE ON (H)
10	AUDIO ERASE HEAD
11	AUDIO HEAD
12	AUDIO HEAD
13	
14	V-SYNC
15	UNSW +14V
16	UNSW +5V(VIDEO)
17	
18	SW +12V
19	UNSW -30V
20	ENVELOPE VOLTAGE
21	CUE/REV/X2/SS (L)
22	VIDEO EE (H)
23	PB (L)
24	SLP (H)
25	LP/SLP (H)
26	AUDIO MUTE (H)
27	VIDEO DELAY REC (H)
28	DELAY REC +12V
29	
30	HEAD SW
31	V-LOCK PULSE

(LOCATION GRID NO. IN MAIN II SCHEMATIC DIAGRAM:G4-G7)

P1201 TO POWER SUPPLY

5	POWER DOWN (L) P1001-3
2	UNSW +44V P1001-2
1	UNSW +14V P1001-1
4	GND P1001-4
5	UNSW +5V (VIDEO) P1001-5
6	UNSW +5V (SYS-CTL) P1001-6
7	UNSW -30V P1001-7

TO CAPSTAN MOTOR DRIVE P6201

P2501-24	24
P2501-23	GND 23
P2501-15	REV(H)/STOP(M)/FWD(L) 15
P2501-14	V REF 14
P2501-13	CAP ERROR 13
P2501-17	CAP TORQUE LIMIT 17
P2501-20	15V (SYS-CTL) 20
P2501-18	UNSW +14V 18
P2501-16	GND 16
P2501-11	CAP FG (+) 11
P2501-12	CAP FG (-) 12
P2501-7	MODE SW POSITION A 7
P2501-21	MODE SW POSITION B 21
P2501-22	MODE SW POSITION C 22
P2501-8	MODE SW POSITION D 8
P2501-19	GND 19
P2501-10	LOADING MOTOR (+) 10
P2501-9	LOADING MOTOR (-) 9
P2501-1	AUDIO HEAD 1
P2501-2	AUDIO HEAD 2
P2501-4	AUDIO ERASE HEAD 4
P2501-3	FULL ERASE ON (H) 3
P2501-5	CONTROL HEAD GND 5
P2501-6	CONTROL HEAD 6

POWER SECTION
NOTE REF. NO. ON C.B.A. IS PRINTED AS FOLLOWS.
EXAMPLE C.B.A....R2, REF. NO. 1200 SERIES
SCHEMATIC DIAGRAM...R1202
(R1202 IS ABBREVIATED TO R2.)

SYSTEM CONTROL SECTION
NOTE REF. NO. ON C.B.A. IS PRINTED AS FOLLOWS.
EXAMPLE C.B.A....R2, REF. NO. 6000 SERIES
SCHEMATIC DIAGRAM....R6002
(R6002 IS ABBREVIATED TO R2.)

SERVO SECTION
NOTE REF. NO. ON C.B.A. IS PRINTED AS FOLLOWS.
EXAMPLE C.B.A....R2 REF. NO. 6200 SERIES
SCHEMATIC DIAGRAM...R6202
(R6202 IS ABBREVIATED TO R2.)

UNLESS OTHERWISE SPECIFIED:
DIODES ARE MA165/1SS119.
PNP TRANSISTORS ARE 2SB709(Q-R-S)/2SA1037KR/KS.
NPN TRANSISTORS ARE 2SD601(Q-R-S)/2SC2412KR/KS AND
WATTAGE OF RESISTORS ARE 1/8W-1/10W AND 1/16W.

VJBS02172

MAIN II (AUDIO/SIGNAL PROCESS/CYLINDER DRIVE) SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SPECIFIED PARTS.

NOTE: MARK "▪" IS LEADLESS (CHIP) COMPONENT.

NOTE: HOW TO READ CONVERGED LINES
(100)B4
LOCATION GRID OF THE OTHER END OF THE LINE
LINE NUMBER

TEST POINT INFORMATION
▭→ USED FOR THE INDICATION OF TEST POINT WITH COMPONENT LEAD ON FOIL SIDE.
▭→ USED FOR THE INDICATION OF TEST POINT WITH COMPONENT LEAD ON COMPONENT SIDE.
⊘ USED FOR THE INDICATION OF TEST POINT WITH NO TEST PIN.
● USED FOR THE INDICATION OF TEST POINT WITH TEST PIN.

NOTE:
1. DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.
2. MAINTAIN ORIGINAL FUNCTION AND RELIABILITY OF REPAIRED UNITS. ONLY USE ORIGINAL REPLACEMENT PARTS WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THE SERVICE MANUAL.

CYLINDER DRIVE SECTION	
IC	
IC2601	M-9
CONNECTOR	
P2601	K-5

VIDEO SIGNAL PROCESS SECTION	
TRANSISTOR	
Q3001	A-7
Q3002	C-7
Q3003	C-7
Q3006	E-7
Q3007	E-2
Q3010	H-4
Q3012	I-1
IC	
IC3001	A-10
IC3002	F-4
IC3003	E-2
IC3005	C-2
CONNECTOR	
P3001	I-2
TEST POINT	
TP3001	I-4
TP3002	F-3
TP3003	F-3
TP3004	F-1
TP3005	F-1
TP3006	D-9
TP3007	F-9
TP3008	F-9
TP3010	B-3
ADJUSTMENT	
R3044	H-5

AUDIO SECTION	
TRANSISTOR	
Q4101	N-6
IC	
IC4001	O-3
IC4151	N-8
CONNECTOR	
P4001	O-2
P4151	Q-5
P4152	Q-4
TEST POINT	
TP4001	K-6
TP4002	P-6
TP4003	P-3
TP4101	L-6
TP4102	L-7
TPGND4	P-4

DEMODULATOR SECTION	
TRANSISTOR	
Q7001	I-9
Q7002	I-9
Q7003	J-10
Q7006	K-9
Q7101	C-3
IC	
IC7101	B-2

VIDEO SIGNAL PROCESS SECTION
NOTE REF. NO. ON C.B.A. IS PRINTED AS FOLLOWS.
EXAMPLE C.B.A....R2: REF. NO. 3000 SERIES
SCHEMATIC DIAGRAM...R3002
(R3002 IS ABBREVIATED TO R2.)

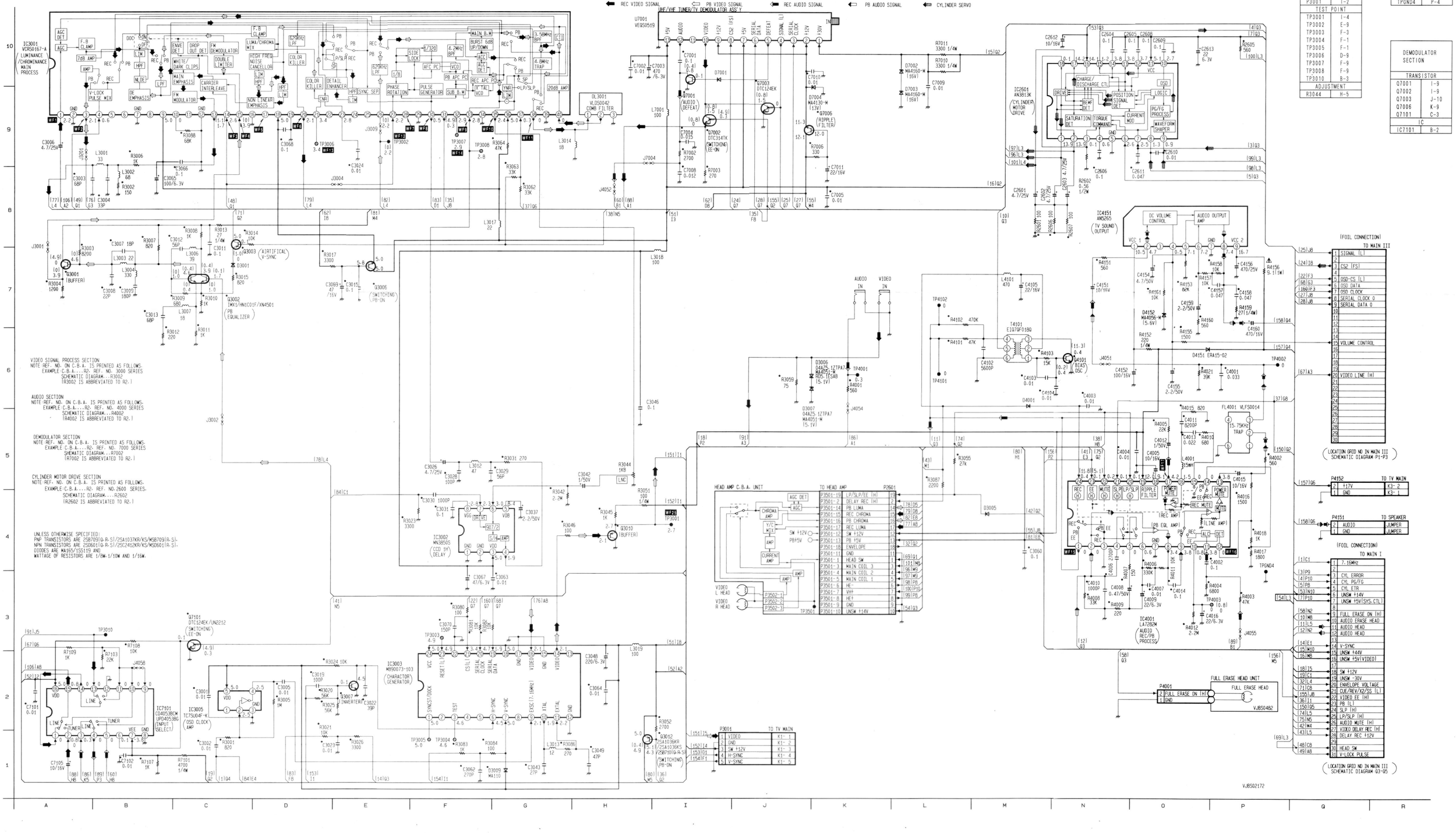
AUDIO SECTION
NOTE REF. NO. ON C.B.A. IS PRINTED AS FOLLOWS.
EXAMPLE C.B.A....R2: REF. NO. 4000 SERIES
SCHEMATIC DIAGRAM...R4002
(R4002 IS ABBREVIATED TO R2.)

DEMODULATOR SECTION
NOTE REF. NO. ON C.B.A. IS PRINTED AS FOLLOWS.
EXAMPLE C.B.A....R2: REF. NO. 7000 SERIES
SHEMATIC DIAGRAM...R7002
(R7002 IS ABBREVIATED TO R2.)

CYLINDER MOTOR DRIVE SECTION
NOTE REF. NO. ON C.B.A. IS PRINTED AS FOLLOWS.
EXAMPLE C.B.A....R2: REF. NO. 2600 SERIES.
SCHEMATIC DIAGRAM...R2602
(R2602 IS ABBREVIATED TO R2.)

UNLESS OTHERWISE SPECIFIED:
PNP TRANSISTORS ARE 2SB709(Q-R-S)/2SA1037K(R/KS/MSB709(R-S).
NPN TRANSISTORS ARE 2SD601(Q-R-S)/2SC2412K(R/KS/MSD601(R-S).
DIODES ARE MA165/1SS119 AND
WATTAGE OF RESISTORS ARE 1/8W-1/10W AND 1/16W.

REC VIDEO SIGNAL ⇦ PB VIDEO SIGNAL ⇦ REC AUDIO SIGNAL ⇦ PB AUDIO SIGNAL ⇦ CYLINDER SERVO



P3001	TO TV MAIN
1 VIDEO	K1- 1
2 GND	K1- 2
3 SW +12V	K1- 3
4 H-SYNC	K1- 4
5 V-SYNC	K1- 5

P4152	TO TV MAIN
2 +17V	K3- 2
1 GND	K3- 1

P4151	TO SPEAKER
2 AUDIO	JUMPER
1 GND	JUMPER

(FOIL CONNECTION) TO MAIN III

1	SIGNAL (L)
2	
3	CS2 (FS)
4	
5	OSD-CS (L)
6	OSD DATA
7	OSD CLOCK
8	SERIAL CLOCK 0
9	SERIAL DATA 0
10	
11	
12	
13	
14	
15	VOLUME CONTROL
16	
17	
18	
19	
20	VIDEO LINE (H)
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

LOCATION GRID NO IN MAIN III SCHEMATIC DIAGRAM: P1-P3

(FOIL CONNECTION) TO MAIN I

1	7.16MHz
2	
3	CYL ERROR
4	CYL PG/FG
5	CYL ETR
6	UNSW +14V
7	UNSW +5V(SYS. CTL)
8	
9	FULL ERASE ON (H)
10	AUDIO ERASE HEAD
11	AUDIO HEAD
12	AUDIO HEAD
13	
14	V-SYNC
15	UNSW +44V
16	UNSW +5V(VIDEO)
17	
18	SW +12V
19	UNSW -30V
20	ENVELOPE VOLTAGE
21	CUE/REV/X2/SS (L)
22	VIDEO EE (H)
23	PB (L)
24	SLP (H)
25	LP/SLP (H)
26	AUDIO MUTE (H)
27	VIDEO DELAY REC (H)
28	DELAY REC +12V
29	
30	HEAD SW
31	V-LOCK PULSE

LOCATION GRID NO IN MAIN III SCHEMATIC DIAGRAM: G3-G5